

## In the Claims

1. (currently amended) A method for transporting data across a plurality of data channels comprising:

concurrently generating a plurality of lesser width parallel data words containing parallel data from a greater width parallel data word by interleaving bits of the greater width parallel data word across the lesser width parallel data words such that ~~all adjacent bits~~ each successive bit of said greater width parallel data word ~~are is~~ contained in different ones within a different one of said lesser width parallel data words, wherein the number of bits in said greater width parallel data word is greater than the number of bits in each of said lesser width parallel data words;

serializing parallel data representative of said plurality of lesser width parallel data words; and

transmitting said serialized data words over a corresponding plurality of distinct serial data channels.

2. (currently amended) A method for transporting data across a plurality of data channels comprising:

concurrently generating a plurality of lesser width parallel data words containing parallel data from a greater width parallel data word by interleaving bits of the greater width parallel data word across the lesser width parallel data words such that ~~all adjacent bits~~ each successive bit of said greater width parallel data word ~~are is~~ contained in different ones within a different one of said lesser width parallel data words, wherein the number of bits in said greater width parallel data word is greater than the number of bits in each of said lesser width parallel data words;

scrambling the parallel data in said lesser width parallel data words to  
form a plurality of scrambled data words;  
serializing said scrambled data words; and  
transmitting said serialized scrambled data words over a  
corresponding plurality of distinct serial data channels.